Claims

1. Use of peripheral-blood mononuclear cells that have been stimulated via cascade priming (CAPRI cells), which are obtainable by the following stimulation process:
   - peripheral-blood mononuclear cells (PBMC) are subjected to primary stimulation by means of agents that stimulate T-lymphocytes
   - naïve PMBC are added to the PBMC that have been subjected to primary stimulation and are incubated for the purpose of stimulating the naïve PBMC,

   for the purpose of providing an agent for the treatment of cancerous diseases.

2. Use according to Claim 1, characterised in that use is made of autologous or allogenic CAPRI cells.

3. Use according to one of Claims 1 or 2, characterised in that the PBMC are subjected to primary stimulation by means of CD3 antibodies and/or B7 antibodies and/or lectins and/or calcium ionophores and/or allogenic cells and/or xenogenic cells.

4. Use according to Claim 3, characterised in that the PBMC are subjected to primary stimulation by means of CD3 antibodies.

5. Use according to Claim 4, characterised in that the PBMC are subjected to primary stimulation by means of immobilised CD3 antibodies.

6. Use according to one of Claims 1-5, characterised in that primary stimulation of the PBMC and/or stimulation

of the naïve PBMC is undertaken in the presence of interleukin-2 and/or interleukin-4 and/or interferon-γ.

7. Use according to one of Claims 1-5, characterised in that the ratio of PBMC subjected to primary stimulation to naïve PBMC is between 1:10 and 10:1.

8. Use according to Claim 7, characterised in that the ratio of PBMC subjected to primary stimulation to naïve PBMC is 1:1.

9. Use according to one of Claims 1-8, characterised in that the CAPRI cells are administered by means of an injection intradermally, intravenously and/or intramuscularly and/or in or around the tumour.

10. Use according to Claim 9, characterised in that the CAPRI cells are administered by means of an injection intradermally and intravenously.

11. Use according to one of Claims 9 or 10, characterised in that the CAPRI cells are administered in a dosage of 0.5-30 million cells per injection.

12. Use according to Claim 11, characterised in that the CAPRI cells are administered in a dosage of 1-20 million cells per injection.

13. Use according to one of Claims 1-12, characterised in that the CAPRI cells are administered together with CD3-stimulated lymphocytes.

14. Use according to Claim 13, characterised in that the CD3-stimulated lymphocytes are administered in a dosage of 1-20 million cells per injection.

15. Use according to one of Claims 13 or 14, characterised in that the CD3-stimulated lymphocytes are administered by means of an injection intradermally and/or intramuscularly.

16. Use according to one of Claims 13-15, characterised in that the CD3-stimulated lymphocytes are administered into a different place in the body of the patient than the CAPRI cells.

17. Use according to one of Claims 1-16, characterised in that it is undertaken together with a medicinal or radiotherapeutic treatment that is matched to the type of disease.